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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/177,837	10/23/1998	MICHAEL BURNETT	00167/318001	3644

7590 06/06/2002

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EXAMINER

WHIPKEY, JASON T

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/177,837

Applicant(s)

BURNETT ET AL.

Examiner

Jason T. Whipkey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
- ✓2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character 18 has been used to designate both an inactive image area and a monitor (Figure 2). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- ✓3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the reference sign "72" mentioned in the description. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- ✓4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the reference sign "98" not mentioned in the description. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to

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avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

- x 5. The disclosure is objected to because of the following informality: Line 27 of page 14 indicates that part 86 is a comparator, while Figure 4 indicates that part 86 is an integrator.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-4, 6, 13-15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamura.

Regarding claim 1, Tamura discloses a camera with an electronic shutter contained in image pickup element 104 (column 4, lines 38-40). The "image size detection circuitry" in system control circuit 117 receives an image signal from the image pickup element 104 via automatic gain control circuit 107, light measuring circuit 112, integrating circuit 113, and comparing circuit 114. System control circuit 117 determines which of the predefined areas shown in figures 7, 8, and 9 will be used in the outputted image and how their exposures will be determined (column 18, lines 51-59). Each of figures 7, 8, and 9 show the total image area captured with unused portions grayed. Electronic shutter control part 120d then controls the electronic shutter in the image pickup element.

Regarding claim 2, figures 7, 8, and 9 show a plurality of predefined shutter response areas, each with different portions shaded. Zoom magnification control part 117b controls the image sensor based on the selected areas (column 14, lines 3-13).

Regarding claim 3, Tamura discloses an exposure control data computing part 117a, which acts as a processor. Since the exposure/zoom areas are predetermined (column 24, lines 27-67), it is inherent that they are stored in a memory.

Regarding claim 4, it is inherent that luminance information is included in the signal outputted from the automatic gain control circuit 107 and supplied to system

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control circuit 117 for determining the portion of the image to be used for exposure and zoom control.

Regarding claim 6, Tamura discloses that image pickup element 4 may be a CCD (column 4, line 8).

Method claims 13, 14, 15, and 17 correspond to apparatus claims 1, 2, 4, and 6, respectively and may be treated as described above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Kyuma.

Tamura discloses an image pickup apparatus as described in the rejection of claims 1-4 above. In addition, Tamura's apparatus has a light-measuring circuit 112 that receives an image signal from the camera containing a luminance component and outputs a signal with the image plane divided into portions (column 12, lines 42-45). In order to do this, light-measuring circuit 112 also receives a gate signal from gate pulse generating part 117f and relates the two signals in order to determine exposure weighting (column 17, lines 28-34), and therefore acts as a comparator. Integrator 113

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receives the output of light-measuring circuit 112 and generates a signal representative of this portion-divided signal (column 12, lines 61-65).

Tamura is silent with regard to using an analog-to-digital converter for receiving a signal from an integrator and outputting a signal useful for controlling exposure.

Kyuma discloses an image pickup device used to control exposure. In Figure 3, Gate 9 receives a image signal — inherently containing a luminance component — for extracting an image signal corresponding to one of a group of preselected areas, integrator 10 integrates the signal corresponding to the selected area, and analog-to-digital converter 11 converts the integrated signal useful to a system control microcomputer 25 (column 6, lines 12-21). Look-up tables 19a, 19b, and 19c contain exposure data used by system control microcomputer 25 (column 6, lines 42-50). The advantage of converting the analog image signal into a digital one is that it may be easily compared to data stored in a look-up table for manipulating the image. Therefore, it would have been obvious to have Tamura's camera contain an A/D converter for exposure control.

Method claim 16 corresponds to apparatus claim 5 and may be treated as described above.

10. Claims 7-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Suzuki.

Tamura discloses an image pickup apparatus as described in the rejection of claims 1-4 and 6 above.

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Tamura is silent with regard to using an endoscope with his device.

Suzuki discloses an exposure control device for an endoscope that takes into account the position of a mask area when determining exposure values (column 7, lines 16-26). The mask area may be of variable shape, as shown in figures 2, 6(A), and 6(B).

The advantage of using an endoscope with an image pickup device having exposure control is that it allows a medical professional to clearly observe areas inside the human body, as is well-known in the art. Therefore, it would have been obvious to have the camera system of Tamura connected to an endoscope.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Suzuki and further in view of Kyuma.

Claim 11 may be treated like claim 5. However, Tamura is silent with regard to using an endoscope with his device.

Suzuki discloses an exposure control device for an endoscope that takes into account the position of a mask area when determining exposure values (column 7, lines 16-26). The mask area may be of variable shape, as shown in figures 2, 6(A), and 6(B).

The advantage of using an endoscope with an image pickup device having exposure control is that it allows a medical professional to clearly observe areas inside the human body, as is well-known in the art. Therefore, it would have been obvious to have the camera system of Tamura connected to an endoscope.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason T. Whipkey, whose telephone number is (703) 305-1819. The examiner can normally be reached Monday through Friday from 8 A.M. to 5:30 P.M. eastern daylight time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9314 for both regular communication and After Final communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to (703) 872-9314 for either formal or informal communications intended for entry. (For informal or draft communications, please label "**PROPOSED**" or "**DRAFT**".)

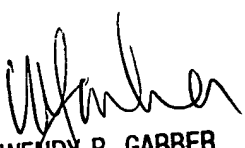
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Hand-delivered responses should be brought to the sixth floor receptionist of
Crystal Park II, 2121 Crystal Drive in Arlington, Virginia.

JTW

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May 21, 2002


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
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